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Address mail to:

Department of the Army
US Army Center for Public Works
Attn: Editor, ***Public Works Digest***, CECPW-P
7701 Telegraph Road
Alexandria, VA 22315-3862
Telephone: (703) 428-6404 DSN 328
FAX: (703) 428-7926
e-mail: alex.k.stakhiv@cpw01.usace.army.mil

Edward T. Watling
Director—U.S. Army Center for Public Works

Penelope Schmitt
Chief—DPW Liaison Office

Alexandra K. Stakhiv
Editor

Design and Layout:
Susan A. Shugars
RPI Marketing Communications
Baltimore, MD

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"We're all in this together!" Chief tells DPWs

by Penelope Schmitt

LTG Joe Ballard promised DPWs last December: *"When I come back next year, I will talk to you about RESULTS."*

At this year's Worldwide DPW Training Workshop, the Chief was indeed back—and reporting on a year of significant progress. "We've made a good start," he said, "but there's lots more to come!"

The "more" will be in the areas of collocation, customer service, challenges to S&A levels, design by Charette. The "results" are in on the MACOM Advocacy program and the planned Videoteleconferences (VTCs), LTG Ballard said. In a year, the VTCs have enabled the Chief to talk with DPWs from TRADOC, FORSCOM, AMC and a gathering of other commands directly about their concerns. The program is slated to continue in 1998. "These have been a resounding success. They've improved *my* understanding!" Ballard said.

This year, "the Corps has changed and will change even more," he said, as the Corps moves to implement its Strategic Vision. A key concept is what Ballard calls "Virtual Operations." In his view, this means the entire Corps becoming able to respond as one entity to customer needs. The key concept, "One Door to the Corps," describes how customers should be able to get "full access to the capabilities of the Corps. When somebody comes to us, we don't create new capabilities and make the customer pay for them, we find where that capability IS in the Corps and use that."

"We are in this together!" Ballard emphasized. "We are not the Corps out to sell to the DPW. We are Engineers. Together. Solving Army problems the best way possible!"

Steve Flier of Fort Leonard Wood explains his environmental program to LTG Joe N. Ballard, Chief of Engineers.

Winning the infrastructure war

The Chief acknowledged that installations continue to "take a beating" in the RPMA arena. Everyone is experiencing competing priorities—like modernization and training versus quality of life. OPTEMPO is looking to RPMA for dollars. Everyone is facing further money and manpower losses—Army-after-next and Quadrennial Defense Review reduction estimates vary up to 22,000 full-time equivalent personnel. OMA, MILCON and Army Family Housing budgets continue to shrink. Installations must cope with a variety of radical initiatives like the Commercial Venture Initiative (CVI) in housing, renewed A76 studies, shorter privatization timelines and the lease reduction program.

"How do we do all this and still skinny down to a Most Efficient Organization (MEO)? How do we do what the Army requires when the pot is getting smaller, and the same number of hands keeps reaching in? I don't see a cohesive program for all these reductions, but we are not the driver. The world as you knew it is going away. This doesn't frighten me. We will have to become much skinnier. We must take charge!"

How does the Chief envision a "take charge" approach? He sees it as a full partnership of the Engineer team. He urged the DPWs to "push from the bottom up" to bring about change.

"Show the RPMA reality to your boss!" he urged. "I'm not sure you're doing that. There's some hand-wringing going on." Ballard urged DPWs to educate their commanders about the true conditions and costs associated with RPMA, and the consequences of operating without a comprehensive installation strategy.

"Develop long-range plans and programs that recognize RPMA reality," he said.

"Demand excellence from your District Engineer—and take challenges to him!"

"Use the Corps Labs to solve special infrastructure problems, environmental problems, maintenance problems."

"You are facing A76, and you may not be able to win it. They've already pulled your savings for the out years [projected savings from commercial activities outsourcing or institution of an MEO]. If you are going to get skinny, insist on excellence and troubleshooting from your District Engineer. Remember, your MEO can and should include your Corps partner."

One team

"We still think we're the best deal in town!" Ballard said, explaining how the Corps plans to reshape itself to meet future DPW needs. "We know each DPW is unique," he said. "We will tailor our support to you." A wide range of tools is now in place to help DPWs get the most from Corps services— ➤

IDIQ contracts, regional and CONUS-wide Energy Savings Performance Contracts, and new working relationships that leverage the power of partnership

"We are not here to pillage and plunder, but to *work* with you!" Ballard said. He cited year-end obligation by the Corps as a great record. "We didn't lose a dime of your funds!" Demonstrating how districts have dramatically raised rates of obligation and execution, Ballard pointed out the success of one District, whose year-end actions—on 30 September alone—have grown from 90 actions and $17.9 million in 1994 to 179 actions and $54.4 million in 1997. "I want to throw this up on the screen for every District and Division, it's the 90-something percent solution. We can execute!"

"I want you to understand we live and die together. We have to be one team! I'm trying hard to hug you—trying to *love* you. But I want some love in return! We've put out many USACE initiatives to support you, but some are still backing away. What does it take? Where are we falling short? USACE, the MACOMS, DPWs, the ACSIM, and combinations of all the above—we are ALL in this together. We are with you—we are stepping out of the box. We are going to get skinny. We're cutting the fat—have even had some RIFs. If the work is not there, ok. But you still need support. You still have sewer lines and need potholes fixed. Army Family Housing may go to CVI, A76 may move in—maybe. But eliminating DPWs is the wrong answer. I want to hug you because you need me—the Army and the Air Force benefit from strong Corps support."

LTG Ballard told the assembled DPWs that he wants to "get rid of the mantra that the Corps costs too much." He sees this as a team action—on the Corps side, lowering costs as much as possible, and on the installation side, looking dispassionately at the big picture. The Chief is asking Corps Districts to hold the line on S&A costs over the next two fiscal years, and to scrub operations so as to minimize costs to customers. Meanwhile, he asked DPWs to carefully analyze costs, to compare apples to apples when looking at providers and the work to be bought and to let their bosses know the whole story.

"The challenges are great," Ballard concluded, "but we are up to the task. I hope my candor has energized your brain cells! We all need to win the infrastructure war—together." PWD

Penny Schmitt is the Chief of CPW's DPW Liaison Office.

"Up on the roof"—Milnes looks at Army future

by Penelope Schmitt

Russ Milnes, Director of Installation Management in the Office of the Deputy Under Secretary of Defense for Industrial Affairs and Installations, began his talk with Army Engineers attending the 1997 workshop by describing the view from his roof. "Every year I climb up there to decorate for Christmas," he said. This year, Milnes made three trips, and took time to look around the neighborhood. "The view looks different from the roof," he said. "I saw how our house fit into the neighborhood, and what the neighborhood looks like, how it's laid out. So I'm going to give you a perspective that's a little like that about the Army—from up on the roof."

In the year since he last spoke with DPWs, District Engineers, and other members of the installation management community, Milnes pointed out, the Defense Department has released four important reports that look out on the future. These were the Quadrennial Defense Review (QDR), the Joint Chiefs of Staff Vision 2010, the Defense Reform Initiative, and the National Defense Panel Report.

Conference attendees survey Corps exhibit, stopping at a computer workstation to see demo of CERL's Hardhat program.

"All these things could impact on you," Milnes told DPWs. "How might you respond?"

The QDR

The QDR report emerged in May 1997. Its focus was on force structure. "We continue to focus on a structure that would support two regional conflicts," Milnes said. The report urges the services and the government to "work on our alliances." We in the installation community must do that as well. We have to respond in many ➤

ways. OPTEMPO is up. Soldiers are all over the world, all the time, engaged in humanitarian missions as well as fire fights. The report shows a concern for preparedness.

The bottom line? It's a 10 division Army with a critical need to modernize.

Vision 2010

This report is the Joint Chiefs' "conceptual template for employing the force," Milnes explained. It was created under the Chairmanship of General Shalikashvili. Its primary tenets are fourfold:

- Maneuver dominance: The U.S. must exercise overwhelming control of the battle SPACE. There's no room for getting behind the power curve.
- Precision engagement: Brisk targeting, near-miraculous accuracy are the hallmarks of this strategy.
- Full Dimension Protection: In the new battle space, things are more visible. Yet acceptability of losses continues to be less tolerable.
- On-time Logistics: What you want when you need it. All of these doctrines build on information superiority of a high order.

National Defense Panel

This is a private sector-membership panel appointed by Secretary of Defense William Cohen. All the information on its findings is available on the web at *www.defenselink.mil*. While the panel report generally follows the QDR findings, it adds three further views:

- DoD needs to work with other agencies better than we do. For example, we need to be more closely allied with the State Department, to work out a broader range of options than simply to negotiate or fight.
- Is a two-dimensional scenario the right one? The panel questions whether the "two regional conflicts" assumption really describes reality.
- DoD needs to transform its business affairs. Despite years of talking about "operating like a business," the panel can't see much change.

Defense Reform Initiative

"This is the one for us to look at closely," Milnes explained. "It asks us to make a transformation in our business affairs. "Just as the Army has worked hard to get information about the battle space to that individual tank commander operating on Fort Irwin, transforming tank-commander level fighting. Just like that, it has to be the same for our business."

"There's an ongoing effort to monitor the programming we do, a Defense Management Council to oversee the work. That panel stands on four procedural pillars," Milnes said. They are Reengineering, Consolidation, Competition, Elimination (BRAC).

Reengineering: "We used to hear this word and take it as a direction to do over—in reports, travel, electronic commerce, and the like. But it does not have to be about rebuilding everything from the bottom up. We are talking about processes. The only one that counts is the one that links back to the customer. The customer is like the tide to a sailor—he can't get off the beach without it. The customer is like the tide to you, too. He MUST become part of your team."

Consolidation: The word is out at OSD level, Milnes said. Thirty percent of the DoD has been "redlined"—15 percent will be cut, 15 percent will be moved. "Does this feel like a road compaction project to create structural integrity?" Milnes asked.

"No, it's not really about running a sheepsfoot roller over your organization. Yes, it is about how to get full capability out of your team."

"The first thing that comes up in circumstances like we're in now, is the spirit of competition with *one another*. But," Milnes repeated a familiar phrase, "we are all in this together. We HAVE to react differently."

He urged the assembled DPWs to take a line from the Chief of Engineers Vision: "Invest in people," he said. "You can build up what I'd call a community of practice, establish virtual networks. I know you DPWs and especially sister Districts and Divisions of the Corps, you haven't been brought up this way." What's needed is to get over the rivalry and turf battles and start putting together a "corporate yellow pages" that will assist customers, wherever they are.

"You have great knowledge that teams can use," Milnes said. "You need to focus on corporate knowledge and lessons learned, on sharing and communicating them. You need to manage the content, not just the wires. You need to get access to your information in place so that all can use it, tap it."

Enterprise: What is it? "It's the thing that galvanizes the team, the object, the deadline," Milnes said. "We will have something on the moon in a decade," President Kennedy told America—and in 1969 a man stepped out on the moon's surface. President Jefferson sent Lewis and Clark out to find a Northwest passage. "They didn't find one, but they had a defining task. That was an *enterprise*," Milnes said. Quoting a journal entry from the first, savage winter the expedition spent in the upper midwest, he quoted the writer's words about the company. It was, he said, "zealously attached to the enterprise."

This is what we must do, Milnes said, zealously attach ourselves to the enterprise. "The Army is facing its biggest difficulties since World War II," he said. "There are *hardships* out there. By 1999, every position in DoD that has to do with installation support will have been scrutinized. "So that is your enterprise—to link up with others to create solutions, to become indispensable members of the team."

"How you handle this 'tough winter' will determine whether you perish, or become the premier Engineer organization you are destined to become!" PWD

Deputy ACSIM sounds urgent call for BASOPs change

by Penelope Schmitt

"We have to get on with it!" Jan Menig, Deputy Assistant Chief of Staff for Installation Management, told participants at the 1997 DPW Worldwide Training Workshop. "It" comprehends a spectrum of urgent actions and initiatives to bring the cost of running Army Base Operations within budget.

The Army is well aware that BASOPS is a key component of readiness, Menig said, and that in today's environment, our installations must support a more intense pace in the sustaining base. Congress and the nation demand ever more efficiency.

"We are sustaining both the home-stationed force and deployments," Menig said. "The average soldier spends approximately 138 days a year deployed." That adds up to a lot of pressure on lines of supply, support operations, and family sustainment at the home base. The Army is also meeting ever higher expectations for quality facilities and living conditions, environmental stewardship, and businesslike operations. Finally, civilian personnel and bargaining units continue to press on employment, retirement, benefits, and work conditions issues.

"Army installations are big business," Menig said. "The ACSIM resourced in excess of $10 billion in FY 1997. We have a total of more than 104 thousand people, military and civilian, appropriated and nonappropriated funded, to manage this huge infrastructure." But guess what? Appropriations to meet the need are shrinking fast. Requirements outpace funding by over a billion dollars a year for the foreseeable future.

"We need to build a stable and predictable program for our installations which is affordable, balanced with acceptable levels of risk, that makes a difference for the soldier in his or her lifetime."

And that's no joke! What Menig means when she says "We have to get on with it!" adds up to items like this:

Tom Pitchford of CPW explains new IFS-M features to Ms. Jan Menig, Deputy ACSIM.

- Current Unaccompanied Soldier and Army Family Housing programs must change rapidly, or some soldiers now entering military life may never enjoy the new barracks standard, or get out of nonstandard family housing during their military careers.
- Demolition of obsolete facilities must continue at a faster pace, or the Army will still be working in "temporary" World War II era wood facilities long after the millennium turns.
- Utilities systems must be privatized more rapidly, or the Army will be paying ever higher bills to maintain and operate obsolete or even failing utilities systems—with fewer dollars every year.

The list goes on—it includes everything from too many employees to fit within the civilian personnel budget goals, too many leases of expensive building space, energy bills that are still too high, and environmental problems that cost the Army—and the taxpayer—too many precious dollars.

It's already "later" and there's no source of funds on the horizon to cover that "pay me later" bill that is coming due for all the services.

The good news in all this is, that the ACSIM is not only willing to lead out with that "let's get on with it!" message. The ACSIM is also focused on helping installations meet the challenges. "The goal is more efficient and *effective* BASOPS," Menig emphasized.

The paths to more effective operations? Outsourcing . . . Privatization . . . Investment . . . Demolition . . . Lease Reduction . . . Environmental Efficiencies.

Outsourcing:

The Army Staff has clearly voted for outsourcing in all its ongoing actions, like the Quadrennial Defense Review (QDR). The views from the top are clear: "Market forces breed efficiency and better value. That means you will be performing A76 studies for all your contractible positions. I want you to remember that half of competitions stay in-house. We are committed to a fair and judicious process." Menig said.

"But you also have to remember that the savings from this venture have already been taken out of the FY 1999-2003 POM! You have to get to your Most Effective Organization or your contracted operation expeditiously. Again, we have to get on with it!"

The plan is currently set to study 56,000 positions by FY 2001. The estimated recurring savings—these are the savings taken in the POM—amount to $560 million annually. The QDR has pushed this initiative forward.

Right now, 14,000 positions are already under study, including a TRADOC-wide study of logistics and public works operations. Whole base studies are also under way.

ACSIM established an office to assist installations with the process in early 1997. Contracts are available to help operations conduct their studies without sacrificing the efforts of the very people who would be key to their

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proposed most efficient operations. Menig urges conference participants to contact the office for assistance.

Investments:

The Army and the Department of Defense have made decisions in recent years to focus funding in a few critical areas, to increase quality of life and to drive down the ongoing cost of running installations.

- Barracks—The Army's goals are to see soldiers in upgraded, renewed or new barracks by 2008 in CONUS, by 2010 in Europe, and by 2012 in Korea. Under the Barracks Upgrade Program, ACSIM is dedicating $150 million in OMA funding for five years. Under Whole Barracks Renewal, $280 million a year in MCA funding will be available for projects.

  "Last year, the BUP money was fenced, the Corps executed it all, and we worked with some standard designs," Menig said. "Together, we did a great job of executing last year. In fact the Corps did so well that we were able to take advantage of flexibilities and execute some additional funds beyond what was originally budgeted. Now, some of you have asked to adapt the designs to meet your local needs, and to manage that money through your own MACOMs. We are meeting your requests. The ball is in your court! Congress will be coming to us to look very closely at how well we do—how well *you* do. The success of meeting this timeline is up to you!"

- Energy conservation—The Army is well on the way to meeting the Federal goal of reducing energy use by 30 percent from the 1985 baseline by 2005. In the coming year, $45 million is available to support energy conservation measures.

- Energy plant modernization—The ACSIM recognizes that not all Army utilities can be outsourced or privatized. $60 million is available each year through 2002 to modernize 29 central heating plants identified as "keepers" by the Army.

- Pollution Prevention Investment Fund—The Army has programmed $49.8 million over the POM years of FY 1999-2003 to achieve reductions in the cost of compliance with environmental regulations. The funding will be focused on projects that promise the highest return on investment.

- BRAC—We are still in the process of reaping the benefits of consolidated facilities and operations from BRAC rounds, especially at Fort Huachuca and Fort Leonard Wood.

Demolition:

"We still have 150 million square feet of excess facilities!" Menig said. "This square footage is excluded from resourced requirements," Menig pointed out. "Neither your MACOMs nor you at the installations gets anything more than the most minimal funding to support those buildings. They are costing you!"

Again, there's help available to get on with the demolition program. From FY 1998-2003, $100 million has been programmed each year, just for demolitions. "That tears down about 53 million square feet," Menig said. "We are working with your MACOMs to develop a five-year plan. We *will* get this done!"

Privatization:

Department of Defense and the Chief of Staff have moved up the deadline on utilities privatization again. What's the new goal? "Privatize 100 percent of all Army utilities by the year 2000. Complete privatization studies for all systems by the close of FY 1999," Menig said. "There is help! CPW is currently actively studying most systems already. We have 265 systems out there. I know in some cases you are going to think this is going to cost you too much, it's not going to be economic for you. But we are looking at what's economic for the *whole Army* here. I ask you to do the same, and to move out on this."

Housing privatization is also moving forward at a faster pace than originally envisioned. "Since 1995, the Business Occupancy Program has been making great progress for Army families. But it's not the final answer. Capital Venture Initiatives will be covering 60 percent of all CONUS installations within the next year or two. We are planning to stand up an Overseas Housing Authority in FY 1999," Menig said. "Look for rapid change in this area."

Lease Reduction: "

The Army holds 5,100 leases—and they cost us $306 million a year," Menig said. "Net savings already sliced out of the FY 1999-2003 POM amount to $66 million, but the real goal is $100 million. We are asking you to find ways to get out of leased space ASAP!"

Environment:

Menig urged conference participants to focus on proactive ways to save money now being spent to correct problems. "Focus on more cost-efficient compliance through prevention," she urged. "Analyze the root causes of problems, develop and implement innovative technologies to help you avoid risks. And establish cooperative partnerships with regulators at every governmental level."

"We know the Army has a long way to go and a very short time to get there," Menig said. "The Installation Status Report is the instrument we will be using to see how well we are tracking toward Armywide goals. We have been working with the infrastructure module since 1995, the environment module goes on line this year, and we expect to develop the quality standard for services over the next year. The ISR can serve as a standard at a time when so many of your other goals are a rapidly moving target."

"We *are* asking a lot from you," Menig admitted. "But I want you to remember to call on us for help in getting the job done. Our only reason for existing is to support you in the field and the Army Staff. We will support you in your A-76 studies, fund your pollution prevention projects, your demolition projects, your energy studies, your privatization studies."

The clock is ticking . . . the ACSIM offers assistance with money and methodology . . . the message for installations stays the same. . . "*get on with it!*"

POC is Claire Marche, (703) 614-1442. PWD

Climbing the learning curve—District/DPW Collocation

by Penelope Schmitt

"Just DO it!—find a way and the benefits will be great!" That's the attitude to carry into a District/DPW collocation effort, according to Pat Biliter, Europe District Deputy Engineer. He talked about Europe District's collocation learning curve during the Worldwide DPW Training Seminar.

The District has a collocated project manager and project engineer at the 104th ASG DPW in Hanau and is adding a program manager and management analyst to the team.

"You will experience creative friction, frustration, growing pains and tremendous rewards," Biliter said. "That's because we're all engineers but DPWs and the Corps have vastly different cultures and experiences. We are united by our passion for engineering and better conditions for soldiers. We offer a formidable combination of talents when we get together. Collocation has driven us to learn from each other. And we are still learning. We've forged an enormously creative relationship in a matter of months."

At first blush, collocation sounds like a matter of logistics and mechanics—the Corps agrees to collocate staff with the DPW, the DPW makes room in his offices, you hook up the computer and phones and make sure you are using compatible software. You share the same coffee pot, work together day to day and start solving problems together.

That's when you realize—to commanders and customers, we are all engineers. But inside the castle, we've lived in two different towers.

"DPWs live in the world of total lifecycle **installation** management. From planning to demolition, a facility is a DPW's concern," Biliter said. "Traditionally, the Corps focused on total life cycle **project** management—from design to construction completion and delivery of the keys. DPWs react hourly to fast breaking problems with no readily apparent solutions; the Corps has traditionally solved defined problems with clear timeframes accompanied by programming documents, directives and funds. The DPW can't say 'no' to his commander about any engineer tasking. The Corps has been able to pick and choose the biggest and best jobs. The DPW's customers are not engineers—the Corps' customers usually are. One thing we've always shared—we both have customers who love to jerk our chains."

Times have changed and Europe District has learned from it, Biliter said.

"We've tackled enough installation support since we our big military construction program dried up in 1989 that the District knew it had to see reality through the DPW's eyes. "We now live in a totally customer-driven world. We knew we had to enter fully into our customers' reality—or go out of business. We adopted a mindset that we would unquestionably accept all work offered by the ASG DPWs, regardless of project size and regardless of type."

One of the most important lessons of collocation is that both the DPW and the District need to be involved in the entire installation support cycle.

Europe District's collocation venture with the 104th ASG DPW reflects a new attitude for the Corps.

"When the Corps began to truly participate in the DPWs life—convenient or inconvenient, easy or too hard, sophisticated engineering or just plumbing problems, we moved into the customer's world."

Biliter said, "Collocation means sharing responsibility for all known and yet-to-surface engineering infrastructure problems in the DPW's area of operation. Every DPW problem instantly becomes a Corps problem."

That's getting collocated right at the heart!

Lessons being learned:

Working alongside the DPW is teaching Europe District the value of a great Army tradition—interdisciplinary skills and engineer generalists. Biliter said, "We started to see very quickly that we at the District need to develop more general practitioners who can function in the field with good skills in design, project management, construction supervision, and facilities engineering. The rigid stovepipes we have maintained in the past won't serve us in a collocation relationship. We need to ➤

LTG Joe N. Ballard, Chief of Engineers, hears the latest news in Europe District from Torrie McAllister.

strengthen our engineers customer care and financial management skills. We need to develop staffs who can all address questions about what we cost and why, how fast we can respond, and what's the range of our expertise, services and products. We can't afford to maintain staffs of highly specialized engineers who "don't do" all these other aspects of serving the customer."

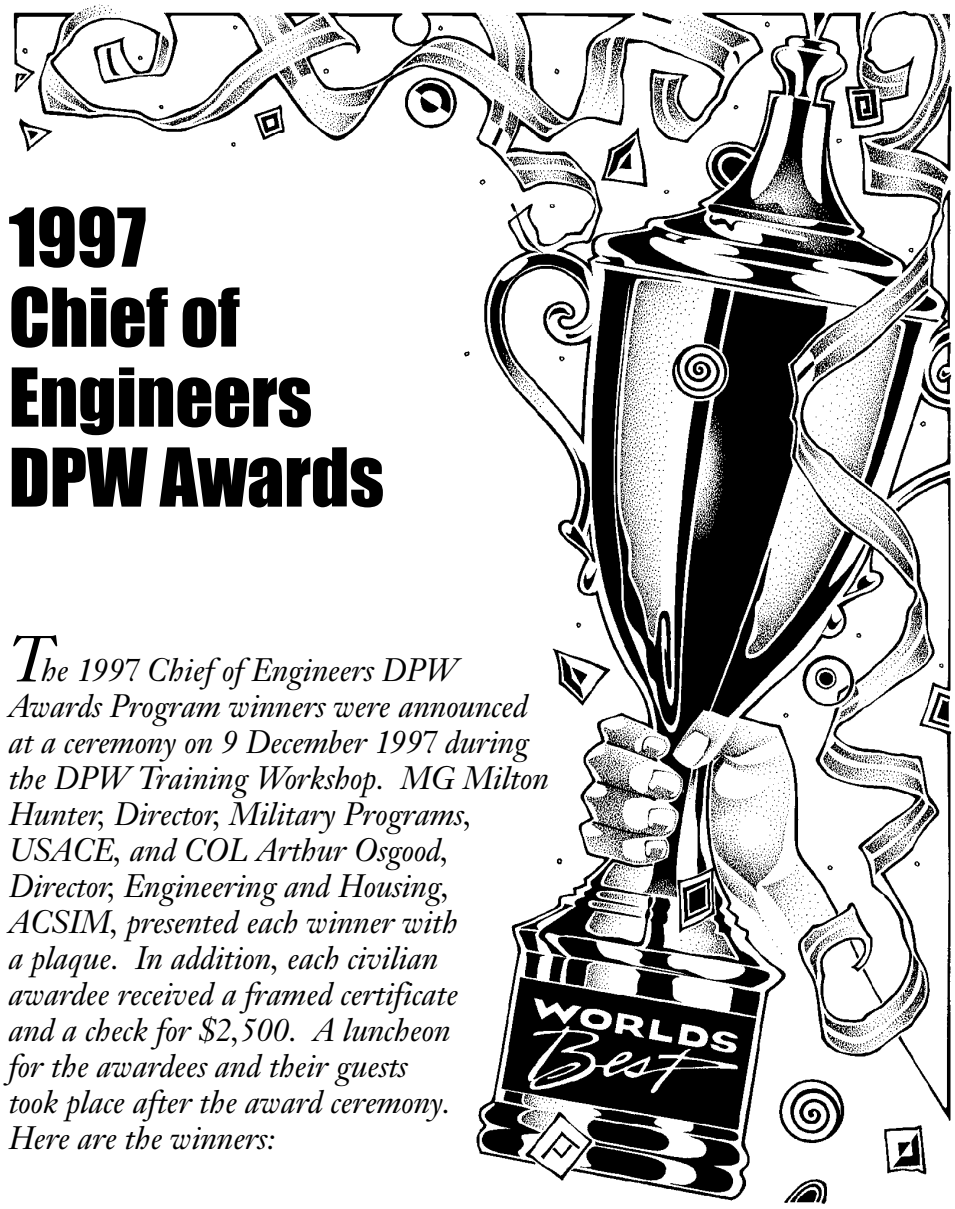
Until recently, the Corps has had the luxury of focusing on a small part of the installation support cycle—design and construction. DPWs must also maintain, repair, renovate, demolish, restore or preserve, plan and program new facilities.

Finding the right balance between centralization and decentralization of the Corps' District staff is another key lesson. Who do you collocate and when is the synergy between experts at the District headquarters essential to get the work done?

"The fact is, decentralization means that districts have to be prepared to put some of their most talented managers out with the customer and that creates gaps for us back at the District's home office," Biliter said. "But the good business practice demands that we put our best project managers with the DPW."

A surprise lesson in communication, Biliter said, is that "the District discovered we've also collocated with *ourselves*. Now that project manager and resident engineer both work out of the DPW, we have closed the distance between engineering and construction. We've grown closer with our own field operations."

Some lessons are easier than other. Both parties have been pleasantly surprised to learn that collocation does bring about some of the things it's designed to do in a very natural way. "The more and the closer we collocate and collaborate, the harder it is to point the finger of blame at one another," Biliter said. "We become a seamless—if not blameless—engineering entity, in our own view as well as the customer's. And that's a very good thing, because commanders don't make fine distinctions among eligible scapegoats for an engineer problem—all they see is "the engineers." **PWD**



1997 Chief of Engineers DPW Awards

The 1997 Chief of Engineers DPW Awards Program winners were announced at a ceremony on 9 December 1997 during the DPW Training Workshop. MG Milton Hunter, Director, Military Programs, USACE, and COL Arthur Osgood, Director, Engineering and Housing, ACSIM, presented each winner with a plaque. In addition, each civilian awardee received a framed certificate and a check for $2,500. A luncheon for the awardees and their guests took place after the award ceremony. Here are the winners:

William C. Gribble, Jr. DPW Executive of the Year

Gregory White – Fort Lee

Highlights:

- Secured Strategic Mobility funds for railroad and substructure repairs supporting mobilization and FEMP dollars to repair or replace components to save energy while upgrading facilities.
- Obtained reimbursable dollars from customers and the QM Foundation to construct additions, and FORSCOM Stationing dollars to accept new missions.
- Placed comprehensive solid waste contract with recycling provisions, resulting in direct savings of $40,000 from the recycling effort and an $8,000 cost avoidance from reduced landfill costs in the first two quarters of the fiscal year.
- Established central emergency dispatch, allowing Fort Lee to fully man two of its firefighting companies.
- Engineered use of a regional AE contract saving participating installations (Tidewater Regional DPWs) several hundred thousand dollars over the last fiscal year.

DPW Housing Executive of the Year

Lawrence F. Constantine – Fort Lee

Highlights:

- Championed construction, installation and replacement of new playgrounds, bus stops, modern kitchens, ceiling fans, road repairs, parking spaces and driveways, closet doors, and baths.
- Improved quality of life for single soldiers in barracks by developing projects for new kitchens, private and functional rooms for NCOs, top notch amenities and furnishings and complete new construction.
- Improved Family Housing Office by constructing children's play area and making office areas warm and "homey."

DPW Operations and Maintenance Executive of the Year

Wayne Errol Shealy – Fort Jackson

Highlights:

- Instituted face-to-face meetings with dining facility managers and work leaders in the Kitchen Equipment Section to help determine quality and satisfaction of maintenance and repair services, identify areas needing improvement, and establish rapport between maintenance personnel and the customers.
- Visited job sites of all sections to encourage his employees, lend a helping hand and coordinate with customers affected by maintenance and repair operations.
- Encouraged training and many self-improvement programs.
- Guided Maintenance Branch personnel in accomplishing a pipe reinsulation project for $60,000 versus the estimated contract cost of $165,000, a building renovation for $20,000 versus $35,000, and an electrical right-of-way clearing for $8,000 versus $25,000.
- Reduced service order backlogs from 350 service orders per section to less than 200.
- Mobilized and led craftsmen after winter snow storm to relight pilot lights for heating and cooking equipment in 1,266 family housing units, ensuring housing occupants with small children had heat restored to their quarters first.

DPW Installation Support Program of the Year

Norfolk District (nominated by Fort Eustis)

Highlights:

- Provided cradle-to-grave management and oversight of nearly every part of Fort Eustis' operation and maintenance, including design and engineering challenges as well as environmental restoration and management and energy conservation.
- Employed Corps' new innovative contracting methods to execute two energy conservation projects using an existing GSA utilities services contract with Virginia Power, setting up four-way partnership with GSA, Virginia Power, Fort Eustis and Norfolk District.
- Helped Fort Eustis receive the Army's Environmental Award in 1996 and 1997 through oversight of pollution prevention and hazardous material control programs.
- Provided engineering, design and contracting support during project initiation, organizing a project delivery team focused to provide an early design and construction contract award with restricted funds and time constraints.
- Provided exceptional, responsive support in completing RPMA designs in anticipation of year-end installation funding, preparing Fort Eustis for the execution of projects critical to the installation's missions.
- Developed and awarded regional indefinite delivery construction contract that allows award with year-end dollars to the end of the fiscal year.

DPW Engineer Resources Management Executive of the Year

Patricia Vaughan – Fort Lee

Highlights:

- Trained many new DPWs, staff engineers and others on DPW budget.
- Developed Excel spreadsheet to track all executable projects and procurement actions used by leadership to prioritize actions, and help close out year with a 99+ percent obligation rate.
- Developed a matrix-type spreadsheet that provides comparison of current year funding versus prior-year funding and shows DPW where funding shortfalls exist, where resources may be available for reprogramming, and where analysis is needed for successful program execution.
- Developed series of review and analysis charts to track key accounts throughout the year and provide clear picture of DPW funding posture while offering an in-depth look at shortfalls and potential problem areas.

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Submit your articles and photographs to the *Public Works Digest*

Department of the Army
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ATTN: Editor, ***Public Works Digest,*** CECPW-P
7701 Telegraph Rd.
Alexandria, VA 22315-3862
Phone: (703) 428-6404 DSN 328
FAX: (703) 428-6805
e-mail: alex.k.stakhiv@cpw01.usace.army.mil

DPW Engineering Plans and Services Executive of the Year

William R. Layng – Fort Eustis

Highlights:

- Vastly improved living conditions for soldiers with multi-year contracts for family housing kitchen and bathroom renovations and upgrades in permanent barracks.
- Transformed division from simple, one mission function to multi-faceted operation, successfully supporting two diverse installations, Fort Eustis and Fort Story, as well as Tidewater Regional Directorate of Public Works.
- Improved working relationships and developed innovative methods to accomplish design and construction quicker **and** cheaper.
- Promoted regional contracts such as the regional roofing and paving contracts for four installations (Tidewater Regional DPWs).
- Consolidated JOC contract for Forts Monroe, Story, and Eustis, saving solicitation and administration costs.

MACOM Support Executive of the Year

Carol Eaton – Housing Director, 19th Theater Army Area Command

Highlights:

- Received an additional $10 million for the Command over the past year under the Business Occupancy Program and Congressional approval for $6 million of add-on housing projects.
- Fought for additional MILCON funds for the upcoming years and for contractors to construct and operate leased housing to eliminate remaining housing shortfalls.
- Developed standardized policy for UPH furnishings, applicable to all installations.
- Actively solicited and advertised excess furnishings throughout the Command and cross leveled items from one installation to another to make maximum use of furniture.
- Promoted combination of local contract construction along with American expertise and technology.
- Established Joint Services Housing Working Group to meet and discuss housing initiatives and issues and solve problems from a common perspective.
- Regularly maintained highest occupancy rate for government-owned units in the U.S. Army— having a funds execution rate of 99.9 percent in FY 96!

Facilities Engineering, Housing and Environmental Management Support Contractor of the Year

Brown & Root Services Corporation (nominated by Fort Benning)

Highlights:

- Led in advancing state-of-the-art in all phases of construction and maintaining and repairing facilities.
- Used sophisticated management tools to direct and lead the small and small disadvantaged local subcontractors in turning out quality projects on time or ahead of schedule.
- Provided outstanding overnight response to an emergency project to rehabilitate a family housing unit heavily damaged by 100-year old oak tree felled by tornado.
- Constructed European Checkpoint and IRT training for $150,000 within two weeks, allowing soldiers headed to Bosnia through the CONUS Replacement Center to train within their cycle.
- After Hurricane Opal hit Fort Benning, ensured 200 buildings and family housing units received new roofs through the JOC program.

DPW Support Executive of the Year

Chris T. Takashige – U.S. Army Garrison, Hawaii

Highlights:

- Implemented customer satisfaction programs within the Energy Department while maintaining the Army's goal of "conserving with common sense."
- Developed and established an energy program for Hawaii to include a command level council, full-time energy manager and energy program infrastructure, allowing existing maintenance and repair processes to continue uninterrupted while an "overlay" energy conservation program was incorporated.
- Helped Hawaii win a second place Department of Army Energy Conservation award in 1996 and a first place in 1997 and helped DPW energy manager win the Federal Energy and Water Management Award for Individuals in 1997!
- Obtained outside energy funds from the Energy Conservation Investment Program and the Federal Energy Management Program and partnerships with private industry to provide 100 percent of the energy departmental budget, enabling Hawaii to carry out a variety of projects and programs covering over 30 million square feet of building space and saving $2.8 million in cost avoidance for electricity, fuel and water.
- Implemented public awareness program to gain and use comprehensive community support, to include promoting energy awareness in schools and family housing through centrally funded energy training seminars and courtesy inspections. These efforts resulted in reduced energy consumption for the last five years from 37.6 Kbtu/SF down to 33.95 Kbtu/SF. PWD

Reshaping defense for the 21st Century impacts on Army utilities

by William F. Eng

Secretary of Defense William S. Cohen announced on 10 November 1997 a sweeping program to reform the business of the Department of Defense (DoD), from the Pentagon down to the support given to soldiers and their families.

The Defense Reform Initiative (DRI) will aggressively apply to DoD those business practices that industry has successfully used to become leaner and more flexible in order to stay competitive. Besides generating savings to fund new weapons systems to maintain America's military superiority, DRI is aimed at making support elements, such as installations, agile and responsive enough to support warfighters.

One of the four pillars of the reform initiative is to eliminate excess infrastructure. The Secretary recognizes that electricity, water, steam, natural gas, and wastewater services are critical to the operation of military installations, but realizes that the required funding to renew and repair the infrastructure that provides these services far exceeds the current and anticipated budgetary resources.

In announcing the DRI, Secretary Cohen accelerated the Army's previously established goals of privatizing 100 percent of its natural gas and 75 percent of the other utility systems by the Year 2003. The Army, as well as the other Military Services must now privatize all utility systems (electric, water, wastewater and natural gas), except those needed for unique security reasons or when privatization is uneconomical, by 1 January 2000. The Services will be submitting their plans for meeting the DoD privatization goals on 13 March 1998.

The DoD utility privatization goals are ambitious, but the Army has already been privatizing utilities since the early 1990s. In fact, the Army is leading DoD in privatizing utilities. Of the 265 utility systems currently serving the major Continental United States (CONUS) installations, 23 are now owned by the utility-provider and approximately 150 have privatization studies underway or completed.

To meet the 1 January 2000 goal, the Army will have to complete the privatization process for 75 systems in fiscal year (FY) 1998, 73 systems in FY 1999, and 72 systems in FY 2000, according to Ms. Jan Menig, Deputy Assistant Chief of Staff for Installation Management's briefing at the December 1997 Worldwide DPW Training Workshop. CONUS Major Commands are now developing their plans for meeting the DRI objectives.

We have a good start on privatization in CONUS, and there will be some efforts to privatize outside CONUS. There are complications overseas where we do not "own" the utility systems, such as the Status of Forces Agreements and highly-regulated or monopolistic utilities, as well as recent economic downturns that could hinder speedy privatization efforts outside the U.S.

The Army leadership, as evidenced in a 1 May 1997 memo from General Dennis General Dennis J. Reimer, the Chief of Staff of the Army, has publicly stated that "...providing utilities is not an Army core function" and that "...com-

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1997— a transition year for the utilities privatization program

Here are the enablers that were put into place:

- A policy for streamlining the process for natural gas systems.
- Chief of Staff memo which tells installations and MACOMs that "Providing utilities is not the Army's core business and we need to get out of it now."
- ACSIM central funding for studies.
- ACSIM policy memo spelling out the roles, responsibilities and procedures. A revision reflects the DoD Reform Initiatives goals.
- New Corps of Engineers policy and procedures to deal with the real estate/real property transfer.
- Congressional authorization for the Service Secretaries to transfer utility systems. With the authorization, the whole process could be cut to a year or 18 months. AAA completed an audit of the program. Findings were: "Over the long run, … Army installations should generally save money from privatizing utilities, … should avoid costly capital expenditures… to upgrade/replace many existing utility systems. The Utilities Privatization Program, if effectively implemented, should enable installations to obtain privatized services at reasonable costs."
- Relief from the tax on Contribution in Aid of Construction (CIAC) requested in FY 1999 legislation. This will make utility transfers more economical to the Army, especially electrical systems, since water and sewer utility transfers were exempt by 1996 tax changes and our natural gas systems are generally abandoned and totally replaced. PWD

panies which provide utility services as their primary business can provide higher levels of service for electric, natural gas, water and wastewater..." than installations can now do on their own, and get the "best value" for the Army.

The Reform Initiative also assigned new responsibilities to the Defense Logistics Agency (DLA) and the Defense Fuel Supply Center (renamed the Defense Energy Support Center (DESC)) for supporting the new DoD utilities privatization program and for the central procurement of utilities. The levels of effort by DLA and DESC are still evolving, as the implementation details are being worked out.

What led the Army and now DoD to pursue privatizing utilities? DoD as a whole has not done well by its utilities infrastructure. The Army, for example, has been reinvesting at a rate which would take a 100 years to revitalize its utilities. We tend to only fix problems when the system fails or we have a negotiated environmental compliance agreement with the regulators. The Army can no longer afford the cost of owning utilities, but still needs the services. The choice should be clear.

MACOMs are now required to link utilities privatization with the MCA project review process. Army Regulations are being revised so that no utility project will be considered unless privatization has been studied and proven not to be a viable alternative.

Through negotiations between the Army and utility providers, installations can get a good utility rate if we turn over a good system. For example, Fort Irwin is concluding an agreement with Southern California Edison for a multi-million dollar sum for their electrical system to be recouped at a rate which will pay over 75 percent of the anticipated utility ownership costs for the first 7-8 years. After that, it is expected that the effects of deregulation of the electrical industry and payoff of a demand side management project should make up any shortfalls. If an installation utility system is in poor condition, the likelihood of future funding for renewing it is slim, making privatization the only way to provide reliable, efficient and modern utility service.

With a utility bill of about $1.0 billion a year, anything the Army can do to reduce it is pure savings. We estimate a $100 million/year savings in avoided MILCON, environmental, and other costs. But the benefits of privatizing utilities are significant and outweigh the perceived cost increases, to include having renewed facilities, reliable service to the people who live and work on installations, and fewer environmental problems.

The Army is well on its way to meeting the SECDEF's target. There are still challenges ahead and we will be working with the MACOMs to meet the DoD Reform Initiative objectives. Finally, the Army has an aggressive program to bring installation utilities into the 21st Century. It lets installations focus on their core functions and purchase first rate utility service that gives the best value to the Army. PWD

William F. Eng is the ACSIM proponent for the Utilities Privatization Program, (703) 428-7078 DSN 328, e-mail: engwf@hqda.army.mil

Business Practices Committee gets down to business

The Business Practices Committee (BPC) In-Process Review (IPR), was held on 4 November 1997 in conjunction with the DPW Combined Users' Training Workshop in Orlando, Florida.

Committee members agreed that installations need to know more about what the BPC is doing to support DPW staffs, streamline business processes, monitor changing business approaches and improve DPW operations. Greg Tsukalas, Chairperson of the BPC, opened the IPR and introduced the Subcommittee presentations. Here's a "report out" on recent committee actions.

Real Property Planning/ Management – *Jerry Zekert, USACPW:*

The Real Property Planning and Management Subcommittee has been very active. Among its accomplishments are:

- Several recommended improvements to IFS-M.
- A new Applied Skills training course for Master Planning.
- Revised AR 405-45, Real Property Inventory.

The subcommittee is currently updating AR 415-28 and Category Codes and converting HQRPLANS to a Windows environment. The group is also supporting installations by trying to influence the consideration of adequate installation real property manpower staffing/grade level and working on affordable master planning. USARPAC is leading the way in the master planning effort. Their goal is to make the plan more relevant so that the commander can use it on a day-to-day basis.

Contracts – *Fred Reid, USACPW:*

This subcommittee has concentrated on improving acquisition, beginning with installation surveys to identify the problems.

Recently, the group addressed the issue of unbalanced funding flow, caused when installations use [divert] DPW money during the year and restore the allocation to the DPW only at year-end.

Other subcommittee accomplishments include:

- Completed the Contracts "as-is" model.
- Validated the Fort Lewis contracts management system.
- Participated in the IFS-M/COTS Test workshops.
- Gave presentations on improving the contracting process.

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Current and future projects include evaluating Fort Lewis' ordering officer capability DA-wide; and a Quick Reference guide showing types of contracts.

Reid gave a number of tips installation staffs can use:

- You must specify that contractors use Army-provided space in the contract.
- Many solicitation packages could be more streamlined.
- Eliminate unnecessary clauses, standards and regulations, and requirements for reports which are never used. Reid cited a requirement for seven pages of reports in the solicitation issued to the City of Monterey for base maintenance at Presidio of Monterey. The city objected and the Army agreed to use the city's existing reports. Remember, contractors' prices increase to accommodate the unnecessary requirements! Streamlining acquisition documents would benefit on-going rewrites such as Fort Hamilton and Fort Belvoir.

Financial Management – *Jude Miller, USMA:*

A recent accomplishment was the renaming of the "M" Account from "engineering services" to "municipal services" in DoD 4000.19 (Reimbursable Policy) to better reflect what goes into the M Account. This subcommittee is currently working on the K Account redesign, trying to crosswalk costs from one report to another among ABC, SBC, and ISR. The effort is to reduce/optimize the number of ways to capture costs (e.g., eliminate TDACs). Budget analysts appear to spend an inordinate amount of time on capturing costs; they need time to analyze and plan.

Subcommittee members also participated in the recent IFS-M/COTS test workshops and wanted to participate in the follow-on/upcoming COTS tests. Future issues may include:

- Cost reporting consolidation.
- Off-post reimbursable accounting.
- IMPAC accounting.
- Work management/project approval streamlining.

Supply – *Scott Monaghan, USACPW:*

Monaghan indicated that a handy guide ("Facilities Engineering Supply and Equipment Reference Guide, Procedures and Guidance for Everyday Operations"), developed mostly with FORSCOM participation, has been published as a booklet. It addresses topical issues in Supply and Equipment and provides guidance and references. It should positively impact AR 420-18, currently in draft mode.

Members of this subcommittee also participated in the COTS workshops at Fort Story. Current projects include:

- A revision of AR 420-18 (manual on Supply, Equipment, and Relocatable Buildings).
- A system interface agreement to build interfaces between the Hazardous Substance Management System, developed by AEC at Aberdeen, and the IFS-M SUPPLY module.

Regarding installation DPW/DOC consolidations, Monaghan said that Fort Campbell had consolidated its supply operations, only to later reverse its decision. With regard to Fort Bragg's DPW/DRM consolidation initiative, John Patton said that they first consolidated, then unconsolidated and finally re-consolidated.

COE Research Program for Business Practices Technology – *Dr. Moonja Kim, USACERL:*

The Facilities Infrastructure Technology (FIT) program was started in order to support Army's facility infrastructure. Identification of user needs is the most important part of the program. CERL is interested in hearing from MACOMs, installation DPWs, CPW, and Corps districts and divisions.

Dr. Kim emphasized that if you want to reap the benefits of R&D, it has to be "front-end loaded!" The major thrusts in FY 98 include an integrated installation management approach, using data mapping and data warehousing and a systematic approach to change management, focusing on best practices and training. There was also some renewed interest in the Automated Labor & Equipment Card (ALEC) system; both the Alaska DPW and USAREUR representatives expressed interest and resources to support system sustainment. Leo Oswalt, USACPW, BPC Executive Secretary, indicated that he would work with CERL to support MACOM/installation ALEC requirements.

POC is Greg Tsukalas, Chairperson, BPC, OACSIM, DAIM-FDF-M, (703) 428-7382 DSN 328. PWD

Help us update the roster!

The DPW Worldwide Roster is a useful tool for all of us, but it's no good if the information it contains is not accurate. To help us update the roster, please review your information as soon as possible.

To review current information:

- Go to the CPW Home Page—http://www.usacpw.belvoir.army.mil
- Choose Phone Book
- Click on the DPW Worldwide Roster

To indicate a change:

- Close the roster
- Click on the link
- Put in the new information

POC is Brigid O'Connor, CPW Web Master, (703) 428-8455 DSN 328. PWD

Millennium

by Phil Conner

Millennium. Many of you will recognize this as the title of a fictional television show that deals with the catastrophes that will occur with the turn of the century and the events leading up to this event. But life may be stranger than fiction.

The Century Date Change problem, also known as the Year 2000 Time Bomb (Y2K), is an event that will occur, and that will affect many logic-based systems. If we are not prepared for it, this event could truly be a catastrophe, affecting operations of Army facilities, and potentially having more far reaching consequences.

What problems will occur when the Y2K bomb hits? There is no across-the-board answer to this question.

Some systems and software are Y2K compliant and will not be affected. The effect for non-Y2K compliant systems will depend on what function the logic device is performing— there may be no noticeable effect, or the system may become non-functional or/and produce unpredictable results. The same is true for the software.

When evaluating the potential consequences, keep in mind that the problem is not the effect on the computer itself, but on the function the computer is performing. Disruption of your personal scheduling calendar resulting from a malfunctioning computer would be an inconvenience, but try to envision the havoc (and hazards) that would result if the application provided an Air Traffic Control display.

The Y2K bomb is a three-pronged problem. The first part is hardware related, consisting of devices using a real time calendar that view the year date as a two-digit function (e.g., 98 and 99 for the years 1998 and 1999). Many computers and automated devices that use embedded microchips and program codes to perform timing or date-related functions perform in this manner. They were built this way to minimize memory needs when computer memory was costly. When the date changes from 1999 to 2000, these devices will identify the digits "00" as being the year 1900, resulting in logic problems that may cause the device/system to malfunction.

The second part of the problem is in the operating system. Depending on the operating system in use, it may or may not be a problem.

The third part of the problem is the installed software. Again, depending on the program, it may or may not present a problem.

The Y2K problem must be fixed before it occurs. There are three phases to the fix: (1) identification; (2) verification; and (3) resolution.

The identification phase involves determination of those systems and devices containing logic chips. Many of these are obvious, such as personal computers and programmable thermostats. Others, such as telephone answering machines and video recorders, may at first not be considered.

On today's Army installations, the types of devices that contain microchips are numerous. While not all of these devices perform a date monitoring function, everything should be cataloged during the identification phase.

To provide some insight into how extensive the problem is, here's a small sample of the types of equipment that may have embedded microchips:

- HVAC and EMS control systems
- Fire alarm and control systems
- Security control systems
- Backup power and lighting
- Elevators
- Water and sewage control systems and other automated plants
- Fax machines and time recording systems
- Traffic light control systems.

In addition, transportation equipment (automobiles, aircraft, etc.) and their stationary support systems must be included in the suspect category, due to the widespread use of on-board computers.

The second phase will verify whether or not the identified component/system is vulnerable to the Y2K bomb. How do you determine if your hardware and software are Y2K compliant? You can test the device and the software by "forcing" it to the 1 January 2000 date and observing the results or by obtaining its status from the individual manufacturer.

There is commercially available software that can be used to "force" most systems and many computer programs, but there is no universal testing program. It will likely take a number of programs to cover all applications. There are firms that are currently specializing in this service, but because of the potential extent of the problem, these services could become costly. (In many cases, it may be advisable to discuss your specific application/problem with them. They may have already encountered the situation and be able to recommend economical corrective actions to you).

Generally speaking, devices that don't have a means of manual input (keyboard) cannot be "forced," and the manufacturer becomes the only source of information. Before doing anything else, you may want to contact the manufacturers of your hardware and software; they can tell you what is Y2K compliant. In many cases, manufacturers are initiating contact, notifying registered owners of hardware and software of Y2K compliance problems.

The resolution phase for susceptible components/systems/software, involves either reprogramming, replacement, or abandonment of the automated function. Some devices can't be reprogrammed, which limits the options. While elimination of a programmable thermostat and return to a simple on-off thermostat may be acceptable, some automated functions can't be eliminated. For systems that can't be reprogrammed, the hardware and software must be replaced.

Hopefully, you have already made substantial progress toward resolving the Y2K problem. If not, you must get started at once, since there are less than two years left. In most cases, it will not be simple or inexpensive, but not resolving the problem, or at least fully understanding the consequences of non-resolution, can be disastrous. PWD

Phil Conner works on utilities and utilities-related mechanical systems issues in the Mechanical and Energy Division of CPW's Engineering Directorate.

DPWs . . . the Vision . . . your plan . . . how does it all fit?

by Dennis Milsten

Good things only happen when you plan them . . . bad things happen on their own.

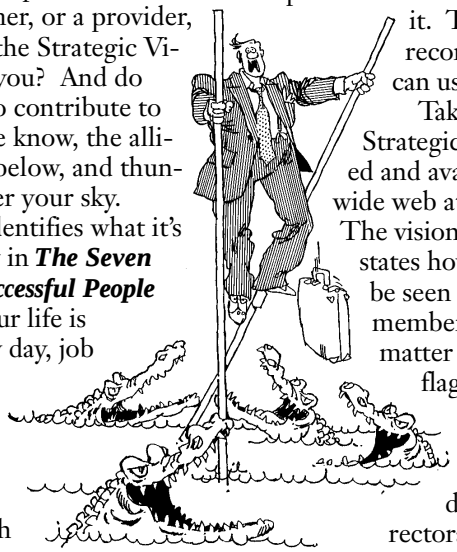
The buzzwords of the day are downsizing. . . rightsizing. . . shrinking resources . . . connectivity. . . Internet. Look around your installation and you are bound to find someone who is trying to steer his course, and maybe yours too, with one of these "mantras of change." But buzzwords are not a plan. They are nothing more than alarm signals for Chicken Little.

As members of the U.S. Army Corps of Engineers family, DPWs and their staffs don't have to be victims of a "sky is falling" mentality. Somewhere out there, you *have* a plan.

The Chief of Engineers, LTG Joe N. Ballard, recognized a need for clear direction, and worked with his leadership team—including DPWs—to create a Strategic Vision intended to guide the Corps family in a new direction. Using the vision, organizations and individuals can begin to plan and move forward as a unified Corps while providing the best engineering support to their customers.

But where do hard-pressed DPWs fit? Are you a customer, or a provider, or both? What can the Strategic Vision possibly do for you? And do you even have *time* to contribute to the Corps' plan? We know, the alligators are snapping below, and thunder clouds are all over your sky.

Stephen Covey identifies what it's like to work this way in ***The Seven Habits of Highly Successful People*** and other books. Your life is *always* a crisis. Every day, job one isn't quality, it's putting out the latest fire. Urgent issues drive out truly important issues. Doing a good enough job to get through prevents you from doing the best job that can be done.



What if there was a better way?

There is! It's like fencing money, so that you will be able to guarantee that you address a truly important need. *Fence some time*. Not all your time. Not necessarily even a lot of time. But do it. Use that time to plan, to evaluate, to execute planned changes, to review what you did and refine your plan some more.

Creating your plan starts with a vision of where you are going. This step is often overlooked. This leads to a situation in which everyone creates a personal idea of direction. Say your vision for a dozen travelers is to "meet at the beach." Where will they end up? Some at Myrtle Beach? Far Rockaway? Big Sur? Maybe they won't go anywhere at all. The goal will be lost. If you truly desire success, you must develop a plan that starts with a clear and specific vision of the future as you see it. The vision has to be recorded, so that others can use it and follow it.

Take a look at the Chief's Strategic Vision—it is recorded and available on the worldwide web at www.usace.army.mil. The vision is simple, and clearly states how the Corps wishes to be seen and known. As a member of the Corps, no matter how "far from the flagpole" you sit, this vision can help focus your efforts.

Suppose you decided that your Directorate of Public Works, as part of the Corps family, would be known as ...

> *A premier engineering organization. Trained and ready to provide support anytime, anyplace. A full spectrum Engineer force of high quality, dedicated soldiers and civilians.*
> - *A vital part of the Army;*
> - *The Engineer team of choice—responding to our Nation's needs in peace and war;*
> - *A values based organization—Respected, Responsive, and Reliable.*

Right away, we hope you'll start to see where DPWs *do* fit in the Corps picture. You are a customer—but you have customers as well. As you evaluate your District and other Corps supporting activities on the basis of their responsiveness and reliability, so you are evaluated by those you serve. For your installation, you *are* "the engineers."

If you and your staff are prepared to support your Garrison Commander anytime, anywhere he needs you, with high quality work by your military and civilian staff members, you will be seen as a vital part of your slice of the Army, you will be chosen, you too will be respected for your responsive and reliable support to the mission.

What's more, the DPWs and other engineer people who fenced part of their time to create this vision for members of the Corps family may have saved some of the precious time you need to fence.

So you have a vision—now, what about a *plan?* Your Installation Master Plan, Annual Work Plan, and Performance Work Statement are the templates you can use to make sure you become what your vision tells you that you want to be.

If you have an Annual Work Plan that details all the projects and programs you want to execute this year, and sets priorities for them, you have a far better chance of moving toward your goal. On October 1, 1998, you can show that document to your Garrison Commander and say with confidence—we accomplished the ten or twelve things that had to be done this year to keep the installation from major infrastructure failures. We completed five other major projects. We eroded our work order backlog by 20 percent. Because we planned, we were ready to move out on six more major needs with year-end funds. We handled two unexpected emergency projects. We ended the year with these problems unfunded and unaddressed. We know what to do tomorrow to move ahead with next year's planned work.

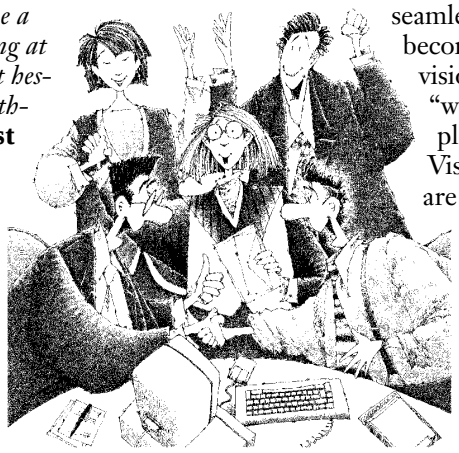
If you have a Master Plan that governs your long-range views, then the Annual Work plan will be easier to build this and all the following years. Some projects will be easy to identify as nonstarters because they don't belong on the installation your post is becoming. Some projects will be obviously important and worth extra effort to complete.

How do you keep all this on track?

There are two answers to this question. First, you not only take some of your fenced time to create those plans, you spend some of that time on review, evaluation, and communication. One of the most effective methods for coping with change is to create a review panel. Charge your panel with examining your plans or proposed changes, and evaluating possible actions for their value added to the long-range vision. Hold up every request for a change and see how it departs from the vision or speeds the journey. If a request for a change or a new project improves your plan, and moves you closer to your vision, accept it!

You have to continually demonstrate that your plan offers a clear path to the desired end. You must communicate and share your plan with those who will be executing it, and with those who will be reaping its benefits. What are you hoping for? That your work force and your customers adopt your plan as their own—that's called "buy in." You must also demonstrate success with your plan. Nothing motivates people to get on board with you more than success.

Don't be discouraged and tempted to say "no one ever follows a plan." If your staff isn't motivated, or hasn't experienced success with following a plan, if you find that they are trying to throw roadblocks in the path, get back to that communication strategy—show them what's working, and how they can make it work better. Look around the DPW community for installations where planning is a vital part of the daily process. Fort Sill's efforts to create customer-based work teams, and to rope customers into the planning effort on a regular, frequent schedule, is one example of successful use of planning. *(See "Funding the Dirty Dozen" in the May 1997 issue of* **Public Works Digest**. *By the way, if you have a successful plan operating at your installation, don't hesitate to share it with others through the* **Digest** *or other publications.)*



The second answer to the question of how to keep on track comes from the Chief's Vision. *Have a strategy!* Again, take advantage of all the work your Corps colleagues have done to create methods that will move you through your plan toward that vision.

The Corps Master Strategy—yours to implement for your own success—has three major thrusts:

- *Revolutionize Effectiveness—Align for success, Satisfy the customer, Build the team*
- *Seek growth opportunities—Serve the Army, Enhance Capabilities*
- *Invest in people—Build strategic commitment, Reshape the culture*

All those strategic goals can be yours, and put to great use in enhancing your support to the installations you serve.

It's axiomatic—you have to Revolutionize Effectiveness just to survive. The planning process itself can help you to better satisfy your customers and build your team. It's an important way to align your organization for success. When you are taking time to plan, to look carefully at what you do through your review panel or other planning group, wheel-spinning efforts will just naturally fall by the wayside.

How are you supposed to grow when everyone wants you to shrink? If you are planning like crazy to enhance your capabilities to do the right things right, the first time, something is sure to grow—your effectiveness. Improved service to the Army will follow right behind that.

Investing in people—it's not about spending money on training courses and opportunities in whatever haphazard way you can nail them down. A stronger team, more committed to the mission, truly results from the planning, evaluating, refining process itself. A culture driven by a vision, a plan seamlessly tied to a vision, become a culture built on vision. It's been said that "without vision, the people perish." Maybe the Vision, and your plans, are the best possible investment of your time after all.

Planning is the key to success. Change and uncertainty can be less unsettling to your work force and your customers if you have well-developed plans in place and in operation. No plan can or should be carved in stone—your plan needs to have some built-in flexibilities. Constant reference to the Vision can help you decide whether your plan is on track. The Vision keeps you focused on the ultimate goal, and prevents you from getting hung up on ways and means. A plan provides a point of departure, but you know it must be adjusted as new requirements develop, missions change, dollars dry up, and people leave. Your productivity and morale will remain high if ia sense of "everything is ok—we have a Vision and a plan" can prevail. Fence the time! Find the energy! You will be surprised at the time and money a well-developed, shared, and implemented plan can save, and the energy it can generate. PWD

Pollution Prevention is key to a more effective Environmental Program

by Alexandra K. Stakhiv

"Our environmental mission is to develop cost-effective measures to protect the environment," COL James E. Dries, Director of Environmental Programs, told the DPWs gathered at the December DPW Worldwide Training Workshop. "Our vision is to integrate environmental values into the mission so that we can sustain readiness and provide sound stewardship of the resources on our installations. To do that, we must be proactive and look at all areas."

One of these areas was the strengthening of community relations. To that end, the U.S. Environmental Center established four regional offices—Western, Central, Northern and Southern. They support the Army/DoD mission by coordinating, communicating, and facilitating regional environmental issues and activities. These regional offices have already had a major impact on educating the regulators on the Army's environmental program initiatives, establishing themselves as reliable points of contact for environmental programs by cross-feeding information among the services. Traveling extensively, the Regional Environmental Coordinators have uncovered and publicized many success stories at the active installations, Army National Guard and Army Reserve.

Our Army Evironmental Program funding stands at about $1.5 billion, said COL Dries. "It's a fairly stable program with many questions. Funding is a requirement built from the installations up."

The annual environmental report card, the FY 98 data call for the Installation Status Report, Part II (ISR II), was mailed out January 15, 1997. For the four environmental pillars, the submission roll-up on the ISR II for FY 97 shows red for pollution prevention only. "This is partly because this pillar gets raided so often to fund other programs," added COL Dries. FY 98 standards were revised based on MACOM installation input. OCONUS will report in FY 98. The standards cover the program performance of 23 media, DoD Measures of Merit (MoMs), and the funding of Must Fund projects.

Compliance, which covers federal, state and local laws, regulations and fines, is a good news story, said COL Dries. The Army got a C1 rating in ISR II and continued to decrease regular enforcement actions and fines over the last three years. The C-ratings back that up.

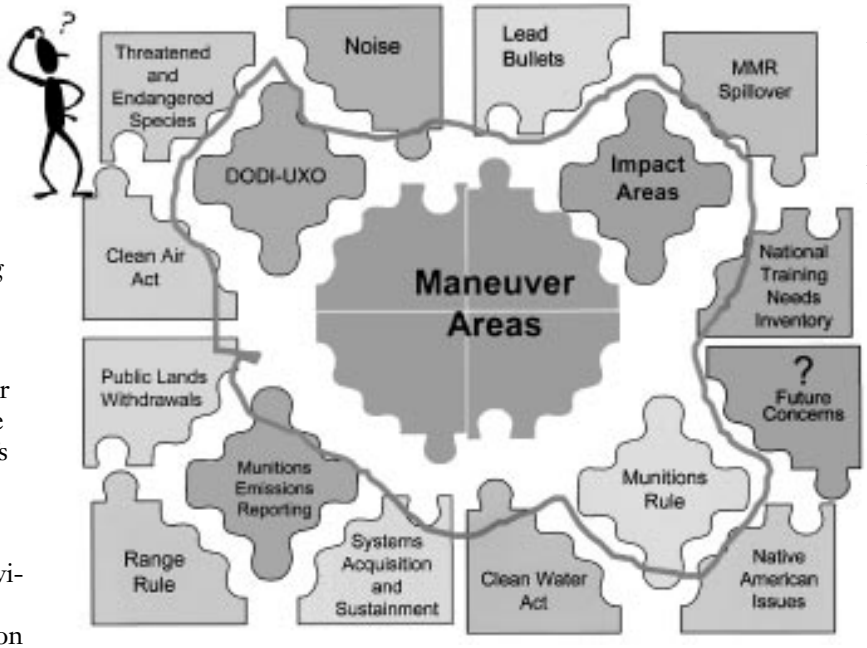
With ***Conservation***, which includes land management, endangered species and historic preservation, the Army has made progress in completing integrated plans and planning level surveys despite low funding. This pillar, a C3 rating, had no major legal or regulatory problems this year.

Restoration, which includes cleanup and Superfund, has had major successes and is a good, sound program with a C1 qualitative rating and a C2 quantitative rating. We are making progress in meeting Defense Policy Guidance (DPG) and DoD MoMs, said COL Dries.

Pollution Prevention, which includes recycling and waste stream reduction, has a C2 qualitative rating and a C4 quantitative rating. However, the Army is on track to meet the FY 99 pollution prevention goals for waste releases and hazardous materials. We will be concentrating on hazardous material tracking, toxic release inventory and the 1999 Waste Reduction Requirements.

"In the training and personnel area, the Army received a C1 qualitative rating because the majority of installations are receiving adequate support from installation commanders and the Environmental Quality Control Committee," said COL Dries. "Nevertheless, we will be facing staffing challenges during downsizing again and integrating environmental training requirements."

The Readiness Puzzle



Major ongoing environmental initiatives for 1998 include:

- **Underground Storage Tanks (USTs)** — U.S. Environmental Protection Agency (EPA) standards promulgated under the authority of the Resource Conservation and Recovery Act (RCRA), Title I, require fill, overfill, and corrosion protection. Full compliance with these standards is consistent with the Army's stewardship responsibilities. According to CSA guidance, on 7 November 1997 the Assistant Chief of Staff for Installation Management issued a memorandum to all Major Commands requiring total compliance with the EPA standards by 30 September 1998. Focusing the Army's efforts on this deadline for USTs, about 3 months ahead of the EPA schedule, will allow time to address any contingencies that may arise.

- **Pollution Prevention Investment Fund** —The Department of Army centrally managed, funded and disbursed the Pollution Prevention Investment Fund for MACOM nominated projects which were evaluated on cost efficiency. In FY 97, we spent $325,000 and for FY 99 to 03 we will have $10M a year. The fund will cover cost-effective installation pollution prevention projects such as off-the-shelf or DoD tested fixes, those with a significant payback and those that treat cost avoidance. Our equipment purchases and process modifications involve toxic chemical releases, hazardous waste disposal, and reductions in hazardous material use.

- **Hazardous Material Management Program** — "How do you deal with hazardous material?" asked COL Dries. "We do it with the Hazardous Material Management Program (HMMP). We need to develop a centralized HMMP for it to be truly efficient, to reduce costs, to report accurately, and to improve our readiness. The DCSLOG/ACSIM memo of 11 July 1997 directed the MACOMs to establish procedures to implement a centralized HMMP. A big step towards a centralized HMMP is using the Hazardous Substance Management System, an information management tool for tracking and reporting. Currently, we have 9 sites operational, 12 sites are underway, and 15 are planned for FY 98.

- **AR 200-3, Natural Resources Management** — "The first draft of AR 200-3 is now complete and we're updating it to address the new Sikes Act Amendments on planning requirements and the AAA report on reimbursable programs," said COL Dries. "We are now at the formal input stage and hope to get approval for printing by July."

- **Sikes Act Reauthorization** —The Sikes Act Reauthorization requires preparation and execution of integrated natural resources management plans at all installations by November 2001. The plans must be coordinated with the U.S. Fish and Wildlife Service and State authorities and reported to Congress along with annual accomplishments.

- **EPA Military Munitions Rule** — The EPA Military Munitions Rule provisions apply to chemical and conventional munitions and define when "used" and "unused" munitions are waste. The DoD Range Rule concerns the cleanup of unexploded ordnance on closed, transferring or transferred ranges. The final Rule is due at the end of the year.

In closing, COL Dries reminded conference participants that if we are to be proactive, we have to look at all the pieces of the "Readiness Puzzle." Our maneuver areas must fit in with Native American issues, lead bullets, threatened and endangered species, public lands withdrawals, munitions emissions reporting, national training needs inventory, MMR spillover, noise, Clean Water Act, Clean Air Act, and much more.

POC is LTC Robert Bassler, Executive Officer for Environmental Programs, (703) 693-0500. PWD

Alexandra K. Stakhiv is the editor of the **Public Works Digest**.

Fort Hood staffer shows flare for cutting costs

An environmental specialist at Fort Hood received a cash award for an Army Ideas for Excellence Program (AIEP) suggestion that will save the Texas post more than $160,000 a year in hazardous waste disposal costs.

Randy Doyle, of Fort Hood's Environmental Division, incorporated a previous AIEP suggestion into his proposal to locally manufacture a smokeless gas flare to burn off residual gas in disposable gas cylinders.

Fort Hood generates 1,200 to 1,500 empty or partially empty disposable gas cylinders each year. Under the post's current hazardous waste contract, it would cost more than $100 each to dispose of these pressurized, flammable containers.

The flare, which cost Doyle about $400 to make from items he found at a local hardware store, can hold up to 10 cylinders at a time. Calling his suggestion a "common sense approach," Doyle said he got the idea from farm equipment he used when he was growing up in Iowa. Once a cylinder has been flared, a modified tire-valve core inserter/remover is used to remove the core of the canister. The canister can then be recycled as scrap.

Wally Crow, of Fort Campbell, Kentucky, made the original suggestion to modify the tire valve inserter. Doyle said he came across Crow's solution while researching and testing his flare, and decided it would work well in combination with his flare idea.

Army installations interested in trying these methods should check with their local regulatory offices for approval.

Reprinted from **Environmental Update**, *Winter 1998. Information provided by the U.S. Army Environmental Center and Fort Hood.*

Fort Hood receives national award from Nature Conservancy

Fort Hood, Texas, received the Nature Conservancy's 1997 President's Conservation Achievement Award, a national award given to recognize exceptional support by individuals and organizations working in partnership with the Conservancy to protect biodiversity. The installation was honored during an awards ceremony September 25, 1997, in San Antonio, Texas.

Fort Hood, which occupies nearly 215,000 acres in the Texas Hill Country near Kileen, harbors significant breeding populations of two globally rare, federally endangered migrant birds: the black-capped vireo and the golden-cheeked warbler. In addition, Fort Hood is home to several rare and unique cave-dwelling animal species that have not yet been classified, as well as a previously undescribed variety of plant species.

"Fort Hood has been a leader in developing and integrating sound ecosystem management practices, and that is reflected in this national award," said Terry Cook, director of conservation science for the Nature Conservancy of Texas, and head of the Conservancy's Fort Hood Project.

The Texas Chapter of the Nature Conservancy has been working cooperatively with the Department of Defense since 1992 to coordinate endangered species research and management at Fort Hood.

"The Department of Defense, as the fifth-largest federal land manager, has recognized that maintaining environmental integrity on military lands relates directly to maintaining the flexibility in training that ensures the readiness of the Armed Forces," said Cook.

In March 1997, a five-year agreement was signed that established a model conservation partnership to provide a scientific foundation upon which the Department of Defense and the Conservancy can promote compatible use of increasingly scarce natural resources at Fort Hood. The main areas of research include:

- The relationship between cattle grazing and the behavior and movement of the brown-headed cowbird.
- Identification of karst (underground limestone) features, cave mapping, related biological inventory and implementation of strategies to protect sensitive features.
- Inventory and monitoring of black-capped vireo and golden-cheeked warbler populations.
- Assessment of landscape-level wildfire on endangered species habitat and populations. PWD

Reprinted from Environmental Update, Winter 1998. Based on a Nature Conservancy press release.

Facilities Engineering

How to obtain Electrical Division technical manuals

There are several ways to obtain CPW Electrical Division technical manuals:

✓ You may download from the USACE home page:
http://www.usace.army.mil
1. Select "Information"
2. Select "P"
3. Select "Publications Library"
4. Download Adobe Acrobat Reader, as indicated, if you wish to print or read
5. Select "Army Technical Manuals"

✓ You may order printed copies via electronic mail from Karl Abt
E-mail: karl.p.abt@usace.army.mil

✓ You may order by telephone from the Publications Depot:
(301) 394-0081, 0082, or 0083
Fax: (301) 394-0084

✓ You may write to the Publications Depot at:
Commander, USACE Publications Depot
ATTN: CEIM-IM-PD
2803 52nd Avenue
Hyattsville, MD 20781-1102

CPW Electrical Division technical manuals currently on the USACE home page include:

- TM 5-683, Facilities Engineering, Electrical Interior Facilities
- TM 5-684, Facilities Engineering, Electrical Exterior Facilities
- TM 5-685, Operation, Maintenance, and Repair of Auxiliary Generators

TM 5-682, Facilities Engineering, Electrical Facilities Safety, is under revision although you may be able to get a 1983 copy from the Publications Depot. TM 5-686, Power Transformer Installation and Maintenance Testing, has been written and is now being circulated for MACOM comments. It should be available in spring 1998.

POC is Peter Cascio, CECPW-EE, (703) 806-5169 DSN 656, FAX: (703) 806-5020, or e-mail: peter.b.cascio @cpw01.usace.army .mil PWD

John Hannaman retires at 81!

John Hannaman has been with the DEH in Panama since 1974. He served as the chief of the Engineering Division for 19 years and chief of the Operations Division for 5 years. He retired on 31 January 1998, just one month short of 59 years of federal service!

Born in Walla Walla, Washington, in 1916, Hannaman moved to Oregon with his parents when he was two years old and later to Wyoming, when he was 13. He graduated from Jackson-Wilson High School in 1934 and from Utah Aggies in 1940 with a degree in Civil Engineering, majoring in structures.

Immediately after graduation, he was hired by the U.S. Bureau of Public Roads (BPR) as a junior Highway Engineer. He worked on highways in Jackson Hole, Teton Park, Teton Pass, Snake RiverGorge and Rushmore National Monument in South Dakota.

In 1942, the Corps of Engineers was advertising job openings for engineers in Panama and Hannaman was hired almost immediately. Eventually, he spent several years as Chief of the Structural Design Branch of the Panama Engineer Division of the Corps of Engineers.

In 1944, Hannaman was drafted into the Army Air Corps and worked in the Air Force Panama Staff Engineer Office. Placed in charge of a large survey crew of military personnel, he prepared a detailed topography map of a substantial portion of Baltra Island in the Galapagoa group of islands. He also had a hand in the design of a concrete wharf made from cribs of interlocking precast concrete sections. The wharf was used to tie up ocean going Army ships that transported supplies and equipment from the Canal Zone to the Galapagos Islands.

After 20 months in the Air Corps, Sergeant Hannaman was discharged, returning to his old job as Chief of the Structural Design Division. One of his tasks involved designing the Curundu culvert, which Hannaman accomplished with the assistance of only one draftsman. A wood and metal building Hannaman designed during this period was used in lieu of wooden frames for squad tents in Guatemala, Honduras and Costa Rica.

When the Panama Engineer Division was abolished, Hannaman remained with the newly created Area Engineer Office under the Jacksonville District Engineer. Most of the design capabilities of the Area Engineer Office were abolished and Hannaman transferred to the USARSO Engineer Office where he became chief of the Technical Staff.

Hannaman and his wife Rose, also retired from federal service, plan to remain in Panama and devote more time to the excellent fishing here. Last year, at age 80, he landed a 499-pound Marlin in the Pearl Islands off the Panama coast. Hannaman says the welcome mat will always be out for old friends and visitors. PWD

Fort Eustis solves leaky tank problem

by Hue Mai

Each of our barracks buildings at Fort Eustis had a 1,000-gallon hot water storage tank, installed when the barracks were constructed in the early 1950s. The tanks were in desperate need of replacement, and our DPW had a lot of service calls with complaints about the water being cold. Trying to hold a consistent water temperature was nearly impossible for us, and maintenance on the aging tank systems was difficult and expensive.

In one case, a 1,000 gallon tank was in such bad condition that it could no longer be repaired. When it failed, the barracks were out of hot water for three weeks, while an emergency purchase was made for a high-cost replacement tank.

The Fort Eustis solution was to remove the 1,000 gallon storage tanks and install instant tankless steam heated systems during the renovation of 14 barracks mechanical rooms. The barracks were out of water for only one day during the system changeover. The old system was kept running up to the time the new system was ready to go.

Installation was easy. The new systems fit through standard doorways without tearing out doors and walls, and also provide a lot of free space for better access during maintenance and repair of piping and equipment in the mechanical rooms.

The new hot water system responds instantly to increased demand and maintains accurate temperature control without cycling. Steam pressure in the heat exchanger is not modulated but constant. This reduces condensate drainage, water hammer, and corrosion problems. Furthermore, the tubes inside the shell are straight for easy mechanical cleaning.

But more important, from a customer perspective, the soldiers get all the hot water they need instantly, with constant temperature at peak demand and low demand. Advantages for the DPW include no leaking storage tanks with standing water, no wasted energy, and lower installation costs, less maintenance, and less space needed in the mechanical room.

POC is Hue Mai, (757) 878-3190, EXT. 276. PWD

Hue Mai is the Chief of the Mechanical and Electrical Section, DPW, Fort Eustis, VA.

Inmates manufacture historical molding

The U.S. Disciplinary Barracks (USDB), Fort Leavenworth, Kansas, is the only maximum-security military prison in the Department of Defense (DoD). Other than custody and control, the prison affords vocational training for the inmate population to train marketable job skills. The USDB vocational training programs employ the same equipment and materials that meet the contemporary industry standards.

The USDB Vocational Wood Shop purchased "high tech" equipment, and developed a training program to manufacture millwork for historically significant homes and buildings on military installations throughout DoD.

The USDB discovered early on, that contractors were having problems locating historical millwork, and when they did find it, the cost was extremely high and the product didn't measure up to expectations. A common problem was an elevated moisture content in wood products resulting in splitting, cracking and warping. The wood shop ensures the raw materials purchased possess the correct moisture content to maintain high quality manufactured products. To sustain the standard, all material is primed immediately after machining with a specially-formulated primer containing a fungus retardant. The product is then dried with an infrared drying system, palletized and shipped.

The Fort Leavenworth Department of Public Works (DPW) purchased 38,000 board feet of vertical grain 5/4" thick tongue-and-groove decking, various handrails, base rails and spindles. The DPW contracted to refurbish 37 homes a year over the next 4 years. The vocational wood shop produced the products in 20 working days, and according to the contractor, was some of the best material he had the opportunity to work with.

The USDB Vocational Wood Shop manufactures millwork such as these handrails for historically significant homes on military installations.

The partnership achieved two goals for the Fort Leavenworth DPW. First, it provided an excellent product at a lower cost that saved the installation $138,000 in the first year. Second, it provided training for the inmates on up-to-date equipment.

Program managers are currently looking for additional partnerships to sustain the mission of providing quality products and meeting historical requirements at a price that will conserve installation resources. "It's not how much money we make, but how much money we save the Department of Defense," said Greg Couch, Chief, Vocational Training Division.

If you are interested in developing a partnership with the USDB Vocational Training Division at your installation, please contact Greg Couch, at (913) 684-3242; or Clyde Cozad, Plant Manager, at (913) 684-4116; or FAX (913) 684-7716. PWD

What is a Cross-Connection Control Program?

by Gregory Jones

Simply put, a cross-connection is a link between the potable water system and some other non-potable system or source.

A cross-connection creates the potential for a backflow condition, which is a reversal in the normal direction of flow. When a backflow condition occurs, the potable water system may become contaminated or polluted, depending on the non-potable source. While pollutants may not cause disease but affect the aesthetic quality of drinking water, a contaminate can cause diseases and pose a health threat.

A Cross-Connection Control Program can prevent backflow conditions. It is the use of plumbing assemblies, devices, methods, and procedures to prevent contamination or pollution of a potable water supply through cross-connections.

Does a Cross-Connection Control Program exist at your installation? If so, how effective is it? An effective program includes:

- A survey and evaluation of the potable water system to identify unprotected cross-connections.
- Inspection and testing of backflow prevention devices (BPDs).
- Verification that BPDs are properly installed and provide adequate protection for the level of hazard present.
- Training in operation and maintenance of BPDs and program management.

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Problems at Fort Tank

by Ron Mundt

It was hard to be driving back to work again after three weeks of vacation. Joe Sparks, the post electrical engineer, was responsible for supplying quality electrical power throughout the installation, including a new seven-story building that housed a top secret secure facility (TSSF).

The TSSF had been a sore spot with Joe ever since the building was occupied. The electrical system had not been commissioned properly and there were continuing problems with circuit breaker nuisance tripping, outages during storms, and periodic failure of the standby power system. Joe had pushed for electrical commissioning, or at least electrical power surveys before building occupancy, but he had been over-ruled.

Bill Thorn was the TSSF building manager. He was continually complaining to Joe about the quality of power from the installation electrical grid.

As Joe Sparks entered his office and picked up the ringing phone, he heard Bill Thorn complaining about unexplained computer equipment problems. A computer tech had made some spot electrical measurements and indicated that there was a harmonic distortion of 700 percent on his system ground and it probably was because of poor electrical power from the installation. Joe did not bother to explain that computers are the worst culprits for harmonic current generation, (since Bill did not have an electrical background), and said he would be right over.

Joe arrived at the TSSF and met several hours with Bill Thorn, concluding that he would perform a building power survey and find out why this building was plagued with so many electrical problems. He would specifically look at the 700 percent harmonic distortion that was found on the system.

Harmonics are basically multiples of the fundamental electrical frequency (60 hertz), generated by equipment such as computers, electrical conditioning devices, or electronic ballasts. They can cause nuisance operation of equipment and overheating of neutral conductors.

Joe's power survey showed poor quality power in some areas, but not enough to cause a problem. The 700 percent distortion had only been a measurement of 70 amps on a 500 amp capacity neutral. Since the fundamental was only 10 amps, 70 amps of the third harmonic would be 700 percent. The problem lay in inadequate wiring. The building had experienced several outages because of a ground fault trip caused by the numerous neutral to ground connections within the computer center instead of just one at the building transformer. These extra ground connections caused circulating currents within the system.

Many times people get caught up in high tech words like harmonics. They think that if our building has harmonics in it, there must be a problem. This is not necessarily so. Joe proved that power surveys are just as important in determining what is not the problem as in determining what is.

Joe explained that if an electrical commissioning building power survey had been completed before occupancy, then most of Bill's electrical problems would not have occurred. Within the next several weeks, the wiring errors were corrected and Joe was not as frequent a visitor to the TSSF building. The moral is: If you have a "thorn" in your side about electrical problems, call the CPW Electrical Division!

POC is Ron Mundt, Electrical Division, (703) 806-5181, e-mail: ron.k.mundt@cpw01.usace army.mil. PWD

Ron Mundt works in the Electrical Division of CPW's Engineering Directorate.

(continued from previous page)

- Preparation of a Cross-Connection Control Plan.

An inventory list with locations of all BPDs, and cost estimates to repair, replace, or install new backflow prevention devices are also essential to a Cross-Connection Control Program. If a program does exist at your installation but has been inactive for several years, your drinking water could be at risk of becoming contaminated through unprotected cross-connections or failed backflow prevention devices. However, when an installation has no backflow prevention program for its water system, the system is out of control. An emergency intrusion of a foreign substance can cause confusion and fear, followed by unnecessary expense to the DPW.

Army Regulation (AR) 40-5, Preventive Medicine, prohibits unprotected cross connections between potable water systems and non-potable water systems. Additionally, the National Standard Plumbing Code must be followed in the design, maintenance, and renovation of water distribution systems and selection of all plumbing fixtures. AR 420-49, Utility Services, requires a Cross-Connection Control Program with backflow prevention devices for those facilities that have the potential to contaminate the water supply system. This regulation also requires a routine inspection and maintenance program for backflow prevention devices by State-certified personnel.

CPW's three-phased Cross-Connection Control Program contains all the elements of an effective program. It is flexible to the specific needs of the customer and uses reimbursable funds to operate. Assistance is provided by use of Indefinite Delivery Type Architect Engineer (AE) contracts. All the work is performed by an AE with oversight responsibility provided by CPW. The costs for contract procurement, travel, and AE services are funded by the installation requesting the service.

For assistance in implementing a cross-connection control program at your installation or for evaluating your existing program, please contact Gregory R. Jones, CECPW-ES, (703) 806-5208 DSN 656. PWD

1998 DPW Corrosion Control Course

Corrosion control is one of the most cost-effective methods available to a public works organization for maintaining buried metallic utility lines, underground storage tanks (USTs), and elevated water storage tanks. The National Association of Corrosion Engineers (NACE) estimates that the return on investment for corrosion control measures exceeds ten-to-one.

The 1998 DPW Corrosion Control Course is scheduled for 4-8 May 1998 in Champaign, Illinois. The course will provide training and information to installation personnel on the causes of corrosion and methods for mitigating or preventing its effects. Topics to be covered include fundamentals of corrosion, coatings, cathodic protection, industrial water treatment, and cathodic protection system testing.

The course will include classroom demonstrations and a field exercise, to give students hands-on experience in taking measurements needed to evaluate the effectiveness of corrosion control measures. Potential measurements are required on cathodic protection systems on underground storage tanks (USTs), to demonstrate compliance with the EPA's UST regulations (40 CFR Part 280), and on natural gas lines to demonstrate compliance with DOT requirements (49 CFR Part 192).

The course will also cover water treatment of heating and cooling systems for the prevention of internal corrosion and scale. Proper water treatment extends the life of boilers, condensate return lines, and cooling systems. Improper, or non-existent, treatment can be costly to an installation. Loss of heated water from condensate return systems can cause significant energy loss and expense. Scale build-up on heat exchanger surfaces reduces heat transfer efficiency, which also results in wasted energy.

In addition to increased energy costs, improper water treatment can drive up maintenance expenses, due to the need to remove scale or replace components damaged by corrosion. In some cases, scale or corrosion can lead to complete failure of the system.

The tuition-free DPW Corrosion Course provides a great opportunity to learn about corrosion, how to test for it, and how to prevent it. To register for the course, or for further information, please contact Jane Anderson, USACPW, (703) 806-5214 DSN 656; e-mail: jane.l.anderson@cpw01.usace.army.mil; and Vince Hock, USACERL, (800) USA-CERL, x6753; e-mail: v-hock@cecer.army.mil. PWD

Federal planners meet in Boston

Army master planners and real property managers will again have an opportunity to meet, learn and share with their counterparts in the other services (and civilian agencies) at the 1998 Federal Planning Division Workshop, 1-3 April in Boston, Massachusetts. As in the past, the workshop will be held in conjunction with the American Planning Association's National Conference. This year's theme, "Revolutionary Ideas," will guide the workshop as it deals with privatization, joint use and other new challenges to DoD and Army installation managers.

For more information, please check the Planning and Real Property area of CPW's website, or contact Rik Wiant at Fredrik.W.Wiant@usace.army.mil or (703) 428-6086 DSN 328. PWD

Army Installation Dam Safety Workshop

An Army Installation Dam Safety Workshop will be held 12-13 May 1998, in Fort Lauderdale, Florida. The workshop will update participants on the Army Installation Dam Safety Program and on Army and Federal regulations pertaining to installation dam safety and ownership.

Army Regulation 420-72, ***Surfaced Areas, Railroad Track, Bridges and Associated Appurtenances*** has recently been revised. The revision provides a new chapter on installation dams, which implements Public Law 92-367, ***National Dam Inspection Act of 1972*** for installation dams. Army installation dams are required to be constructed, maintained, repaired and inspected in accordance with this regulation and referenced Federal Emergency Management Agency documents. The regulation also requires an Emergency Action Plan to be prepared for each high and significant hazard installation dam.

Subjects to be presented at the workshop include:

- An overview of the Army Installation Dam Safety Program.
- A review of the new Army Regulation requirements governing installation dams.
- Instruction on the preparation and implementation of Emergency Action Plans.

The workshop is geared to both engineer and non-engineer personnel with responsibility for managing, maintaining or inspecting installation dams. It is especially recommended for those from installations with high or significant hazard dams.

There is no tuition or registration fee for the workshop. Training forms are not required. Spaces are limited and will be filled on a first-come, first-served basis.

Point of contact for registration and further information is Ron Beaucham, CECPW-ER, (703) 806-5994, FAX: (703) 806-5219 DSN 656. PWD

Survey for additional classes of basic HVAC design

The Professional Development and Support Center through Corps Headquarters is conducting a survey to determine the interest for a second HVAC: Design Basic (course #391) PROSPECT course in addition to the yearly course offered each Spring. In the past, there has been high interest from a number of federal government agencies but the number of students per course is limited resulting in delaying interested students an additional year or more.

The **HVAC Design Basic** course, which lasts five days, provides excellent coverage of all subjects necessary for a good design including: heating and cooling load calculations, psychrometrics, equipment selection, ductwork sizing, hydronic sizing, sound and vibration control and indoor air quality. Instruction on these topics is basic yet thorough enough for all experience levels to benefit, from the new designer to the experienced HVAC engineer.

Interested students can contact Janine Wright at (205) 895-7455. The web site, which gives a complete course description, can be found at www.hnd.usace.army.mil/to/tdindex.htm. If you have any technical questions, please contact Randy Miller, (205) 895-1705, or Tim Gordon, (202) 761-1773. PWD

Air Force Institute of Technology (AFIT) Training

The Civil Engineer and Services School (CESS) of the Air Force Institute of Technology (AFIT) is now on the Internet at http://cess.afit.af.mil. You will find the yearly training schedule plus a short synopsis for each course offered.

Potential students are still required to submit a DD 1155 through the U.S. Army Center for Public Works (USACPW) to the Institute and must register three months prior to each course. Employees of the U.S. Government and organizations under contract to the Armed Services may attend on a "space available" basis.

The Engineer Design and Environmental Management training courses offered by the AFIT are conducted at Wright-Patterson Air Force Base, Ohio. For more information, please contact Tom Cook, CECPW-FT, (703) 438-6036 DSN 328; e-mail: tom.e.cook@cpw01.usace.army.mil or FAX: (703) 428-7541 DSN 328. PWD

Attention, DPW training managers!

This message is a New Year's reminder to submit your organization's facilities and housing training requests 30 days prior to the start of the class. All courses are entered in the Army's Training Requirements and Resources System (ATRRS) and registration for these resident classes can only be through ATRRS.

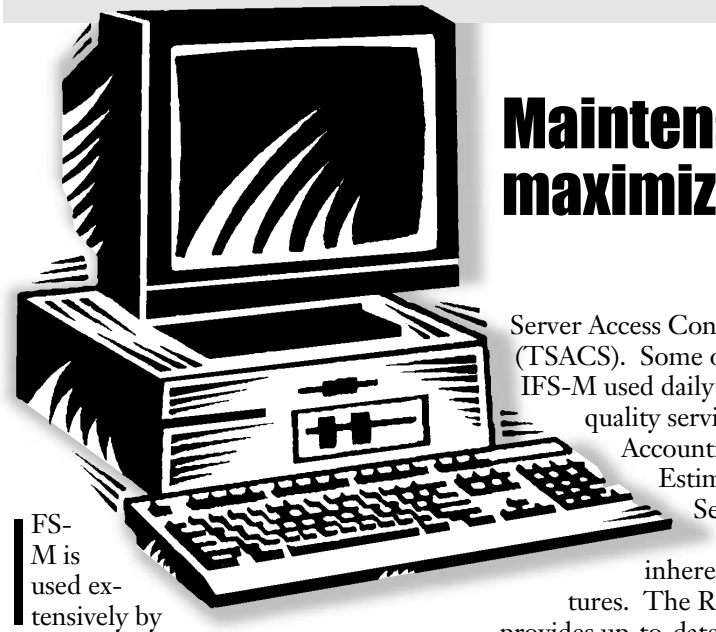
For more information on tuition and registration, please contact our registrar at 703-428-7593 DSN 328, or e-mail: macus.s.seisay@cpw01.usace.army.mil.

For additional information on the course descriptions, please visit our home page at: www.usacpw.belvoir.army.mil/pubs/graybook/graybook.htm.

The following courses are the scheduled classes for the 2nd Quarter FY98.

	Date	Course	ATRRS Number	Location
January	12-16 Jan 98	IFS-M For Senior Managers	508-001	*Canceled*
	12-15 Jan 98	JOC Basic	450-002	*Canceled*
	26-30 Jan 98	Engineer Performance Standards	503-001	*Canceled*
	26 Jan- 06 Feb 98	Public Works Mgmt. Orientation	310-001	Springfield, VA
February	02-05 Feb 98	IFS-M Work Estimating	510-001	Alexandria, VA
	09-13 Feb 98	Advanced SQL For IFS-M	501-001	*Canceled*
	09-12 Feb 98	JOC Basic	450-703	Pax River, MD
	23-26 Feb 98	IFS-M Job Cost Accounting	506-001	Alexandria, VA
	23-27 Feb 98	Army Housing Operations I	101-002	Springfield, VA
March	09-13 Mar	Army Housing Mid-Level Mgmt. II	112-002	Springfield, VA
	09-12 Mar 98	JOC Basic	450-704	On-Site Avail
	16-20 Mar 98	IFS-M Supply	509-002	Alexandria, VA
	23-27 Mar 98	Army Housing Mgmt. Level III	113-001	Springfield, VA
	23 Mar-03 Apr 98	Public Works Mgmt. Orientation	310-002	Springfield, VA PWD

The Kaiserslautern Military Community (Army) Directorate of Public Works has a contracted in-house workforce. The contract is a Cost Plus Award Fee type contract, which provides basic maintenance and repair to over 2,500 facilities across 1,100 square miles. The contract has over 350 workers and costs $19 million/year. Federal Services International has won several USAREUR "RPMA Contractor of the Year" awards, the most recent being in FY97. The Kaiserslautern contractor also won the Department of the Army "RPMA contractor of the Year" award for FY 94.



Maintenance and repair contractor maximizes use of IFS-M

by Jorge Blanco

IFS-M is used extensively by ITT Federal Services (ITT FSIC) in managing real property maintenance in the Kaiserslautern, Germany, area for the Directorate of Public Works (DPW) Kaiserslautern. From tracking inventory and scheduling preventive maintenance routines to scheduling work orders, IFS-M plays a key role in providing timely quality service to our customers.

In May 1997, ITT Federal Services installed a Local Area Network (LAN) to support IFS-M ICP#10-01; the migration from the UNISYS 5000 mainframe to a PC based UNIX server. The client/server environment has decreased IFS-M down time significantly. The UNISYS 5000 was typically down for unscheduled maintenance one to two days a week. With the new system, IFS-M is down only one hour a week for routine maintenance.

The LAN supports 50 users, allowing for fast and reliable access to IFS-M. Users include estimators, master craftsmen, and Procurement and Production Control personnel. Work centers, Self-Help and Material Control are remotely connected to IFS-M via the Terminal Server Access Controller System (TSACS). Some of the features of IFS-M used daily by FSIC to provide quality service include Job Cost Accounting, Real Property, Estimating and Customer Service modules.

IFS-M has many inherent cost savings features. The Real Property module provides up-to-date accounts of all real property, to include installed equipment. Warranty information is tracked by the computer for all real property. If a service order is placed against equipment or building under warranty, IFS-M automatically notifies the user. Production control can make arrangements for warranty replacement or repair. Another feature notifies the work receptionist of building status, so a service order is not generated for a building scheduled for demolition.

Job Cost Accounting is used to provide management tools for tracking all work documents in all phases of work from customer service through completion. FSIC management tracks work estimates, ensuring actual costs are within 10 percent of estimates, and service orders total less than $1,000. FSIC produces monthly expenditure reports for DPW, allowing the DPW to budget and prioritize upcoming projects throughout the year. Having the right balance of skills is critical in a diverse environment like Kaiserslautern.

FSIC management uses IFS-M to review authorized man-hours and actual expended man-hours to adjust manning requirements throughout the project. Providing the customer with timely service is of paramount importance to FSIC. Estimators use the estimating module for estimating costs of labor and material for Service Orders and IJOs. IFS-M provides the scheduler with data to track and schedule work on specific facilities. IFS-M provides Work Reception personnel easy access for answering customer questions on status of work requested. Work center management can dial-up from remote locations and routinely check the percentage of job completion and material status to ensure on-time completion.

IFS-M plays a key role in assisting FSIC employees in providing quality service to our customers in the Kaiserslautern area. We could write pages of text explaining exactly how, where and why FSIC uses the full capabilities of IFS-M. IFS-M is a complete computer based management system for facilities maintenance. Each part of IFS-M has its own function, yet supplies valuable information to produce a complete facilities management system. IFS-M provides the government and contractor employees with the tools to get the job done.

POC is Gerry Smoliak, Project Manager for ITT-Federal Services International Corp, DSN 483-8118. PWD

Jorge Blanco is the Director of Public Works, 415th Base Support Battalion, Kaiserslautern, Germany, DSN 483-1560.

Web saves resources at Fort Campbell

by Ted A. Reece

Alexander Pope wrote, "Be not the first by whom the new are tried, nor yet the last to lay the old aside." This seems like sound advice and describes the thought process by which the Public Works Business Center (PWBC) and the Directorate of Contracting (DOC) collaborated on to replace current printed media reproductions of contract bid documents in favor of the Internet.

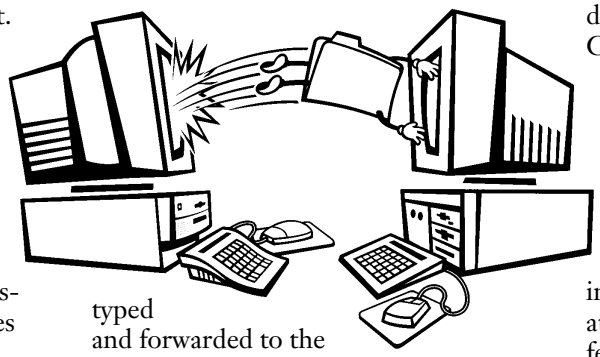
As Business Centers look for process improvements, the DPW engineers requested the formation of a working level committee to implement placement of solicitations on the Internet. After preparing a briefing packet based upon Tri-Service CADD/GIS Technology Center's recommendations, the committee established time lines and subcommittees to secure the implementation plan. Scott Slade, PWBC engineering technician, and Patty Shaffer, DOC systems administrator, championed these committees beginning in October 1996.

Within the first 45 days, DOC had created its homepage and obtained a link to Fort Campbell's web site. Meanwhile, the engineers obtained the software (Adobe Acrobat and Sourceview) and the first set of engineering documents were piloted on DOC's file server and successfully downloaded to a secondary site. To date, 61 solicitations have been placed on the Internet with many accolades from the contracting community.

Contract solicitations may be accessed through the Fort Campbell homepage at **www.campbell.army.mil/campbell.htm**. The following topics are available:

- **Solicitations** – Full text of all solicitations greater than $100,000 and some of lesser value including drawings and other attachments.
- **Amendments** – Amendments are posted in full text with a summary reference.
- **Bid Results** – Bids received on the Invitation for Bid solicitations are posted, saving considerable time in reporting and answering contractor and vendor questions.
- **List of Active Contracts** – This data is offered as a convenience to vendors and suppliers who wish to contact contractors working on the installation.

For the past ten years, Fort Campbell's Engineering Design Branch had used microfilm cards as the primary source for providing plans to contractors. Construction Specifications or Performance Work Statements were typed and forwarded to the Contracting Office where the complete solicitations were compiled, reproduced and mailed to prospective bidders. Both reproduction processes were very labor intensive and materially expensive. In addition, contractors found the microfilm a burden to view and costly to print.



We have just completed our first year of providing solicitations on the Internet and reaction from the business community has been overwhelmingly positive. While continuing to provide both hard copy and Internet service to interested parties during this inaugural year, we look forward to providing all future contracts via electronic media.

As of 1 October 1997, the majority of all engineering design projects are only available to contractors and vendors via the Internet. As a result, Fort Campbell has implemented tremendous cost savings for the government in eliminating hard copy reproductions while enhancing customer service and satisfaction.

To obtain a prepared summary of the technical requirements and overview of the preparation and posting process, please contact Ms. Shaffer at (502) 798-7805 or e-mail: shafferp@campbell.emh5.army.mil. PWD

Ted A. Reece works at the Engineering Design Public Works Business Center at Fort Campbell, KY, (502) 798-7213.

1998 DLA Environmental Products Catalog

The 1998 DLA Environmental Products (EP) catalog is available in electronic format on the World Wide Web. This catalog provides environmentally-friendly alternatives to previously used products or processes. These may be non-ozone depleting, less toxic, or promote recycling and waste minimization.

There are over 850 national stock-numbered items in 19 product categories in the 1998 catalog. Two new categories have been added this year, Reusable Batteries and Alternative Refrigerants. Other categories have been expanded with the addition of new items. In addition, there are significant price reductions on some of the most popular items. The catalog also has increased the points of contact section, which will help customers request additional information from any of the DLA supply centers. Products may be purchased directly on-line.

The internet address for the DLA EP catalog is http://www.dscr.dla.mil. To be added to the mailing list for hard copies of the catalog, please call the Defense Service Center, Richmond, Product Marketing Division, at (800) 345-6333 or DSN 695-5699. If you have any questions about the catalog, please contact Stephen Perez at (804) 279-6054 or e-mail: sperez@dscr.dla.mil. PWD

Public Works Digest

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- ✔ Reports impacting Army future
- ✔ Bringing BASOPs within budget

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